

**IN THE CLAIMS****Listing of Claims:**

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-NOL 7/14/05

1. **(Currently Amended)** A process for fabricating a semiconductor substrate with a single-crystal lattice, the process comprising the successive steps of:

a) forming a substrate with a single-crystal lattice, the substrate having a top surface with at least one discontinuity in the single-crystal lattice therein, whereby the top surface of the substrate has a recess at the discontinuity on the top surface;

b) amorphizing the single-crystal lattice around a periphery of the recess to produce a structure including an amorphized region around the periphery of the recess;

c) prior to any thermal annealing, depositing a layer of amorphous material having the same chemical composition as that of the substrate directly on [[a]] the structure obtained after amorphizing produced in step b; and

d) thermally annealing the amorphous material and the amorphized region around the periphery of the recess, so as to be continuous with each other and with the single-crystal lattice of the substrate.

2. **(Original)** The process according to claim 1, further comprising the step of: planarizing the top surface of the substrate.

3. **(Original)** The process according to claim 2, wherein the step of planarizing the top surface includes planarizing the top surface by a chemical-mechanical polishing.

4. **(Original)** The process according to claim 1, wherein the step of forming the substrate includes forming the substrate with at least part of the material selected from the group of material consisting of silicon, germanium, silicon carbide, and gallium arsenide.